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Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554

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FEDERAL COMMUNICATIONS COMMISSION  
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In the Matter of

Rulemaking to Amend Parts 1, 2, 21 and 25  
of the Commission's Rules to Redesignate  
the 27.5-29.5 GHz Frequency Band, to  
Reallocate the 29.5-30.0 GHz Frequency Band,  
to Establish Rules and Policies for Local  
Multipoint Distribution Services and for  
Fixed Satellite Services

CC Docket No. 92-297

To: The Commission

**COMMENTS OF LOCKHEED MARTIN CORPORATION**

Lockheed Martin Corporation ("Lockheed Martin"), by its attorneys, hereby submits its comments in response to the Fourth Notice of Proposed Rulemaking in the above-referenced proceeding.<sup>1/</sup> For reasons set forth herein, Lockheed Martin supports the Commission's proposal to designate the 31.0-31.3 GHz ("31 GHz") band to the Local Multipoint Distribution Service ("LMDS"). This action would serve the public interest as a logical complement to the FCC's recent First Report and Order designating spectrum in the 28 GHz band for new satellite- and terrestrial-based wireless systems.<sup>2/</sup>

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<sup>1/</sup> Fourth Notice of Proposed Rulemaking in the Matter of Rulemaking to Amend Parts 1, 2, 21 and 25 of the Commission's Rules to Redesignate the 27.5-29.5 GHz Frequency Band, to Reallocate the 29.5-30.0 GHz Frequency Band, to Establish Rules and Policies for Local Multipoint Distribution Service and for Fixed Satellite Services, CC Docket No. 92-297, released July 22, 1996 ("Fourth NPRM").

<sup>2/</sup> First Report and Order in the Matter of Rulemaking to Amend Parts 1, 2, 21 and 25 of the Commission's Rules to Redesignate the 27.5-29.5 GHz Frequency Band, to Reallocate the 29.5-30.0 GHz Frequency Band, to Establish Rules and Policies for Local Multipoint Distribution Service and for Fixed Satellite Services CC Docket No. 92-297, released July 22, 1996 ("First Report and Order").

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### Preliminary Statement

Lockheed Martin is currently seeking FCC authority to construct, launch and operate the Astrolink<sup>TM/SM</sup> satellite system, a global constellation of nine geostationary satellites located in five orbital positions connected by intersatellite links. The Astrolink<sup>TM/SM</sup> system will utilize Ka-band spectrum in the 28 GHz frequency range to offer a broad array of digital communications services, including voice, data, and video, via the most advanced satellite and ground terminal technology available. The FCC's recent First Report and Order adopting a band segmentation plan in the 28 GHz rulemaking proceeding clears a major regulatory hurdle that will permit the licensing of Astrolink<sup>TM/SM</sup> and other sophisticated Ka-band networks.

The Commission's Fourth NPRM proposal to allocate 31 GHz spectrum for LMDS is an outgrowth of this 28 GHz proceeding, a lengthy regulatory endeavor to accommodate a variety of satellite and terrestrial systems in the 28 GHz band. For a long period of time, diverse segments of the communications industry have vied for spectrum at 28 GHz in order to implement their respective systems. Both the Commission and private interests alike have struggled tirelessly to finalize 28 GHz spectrum allocations for LMDS, geostationary-orbit fixed-satellite service ("GSO FSS") systems, non-geostationary orbit fixed-satellite service ("NGSO FSS") systems, and feeder links for non-geostationary-orbit-mobile satellite service ("NGSO MSS") systems. The band plan announced in the First Report and Order provides a fair and balanced framework that will permit all proposed services to develop and offer innovative communications services to the public. The 28 GHz plan also reflects a solution reached by settlement and compromise among various competing interests. Viewed from this perspective, the 28 GHz decision must be seen as a major accomplishment, and the Commission can be commended for its role in achieving a favorable result.

The LMDS community, however, seeks additional spectrum to achieve its business objectives, and the Commission has proposed a 31 GHz allocation for this purpose. Lockheed Martin believes that designating an additional band segment at 31 GHz would be an appropriate and responsible regulatory response to satisfy the further spectrum needs of LMDS.

Designating 31 GHz Frequencies for LMDS  
Would Serve the Public Interest

Lockheed Martin believes that important public interest benefits would be attained by designating new spectrum for LMDS at 31 GHz. There are many reasons to commend the Commission's 31 GHz proposal, including the following fundamental points:

First, by allocating an additional 300 MHz of spectrum for LMDS use, the Commission will complete a long and arduous regulatory endeavor to satisfy the spectrum requirements of LMDS, GSO FSS systems, NGSO FSS systems and MSS feeder links. The record in this proceeding need not be repeated in detail here. Ultimately, however, a broad coalition of interests representing the various competing services including LMDS, GSO FSS, NGSO FSS and MSS feeder links, urged adoption of the band segmentation plan proposed by the Commission in the Third NPRM.<sup>3/</sup> This significant breakthrough, together with a proposal to designate new spectrum at 31 GHz for LMDS, satisfies the spectrum requirements of all parties, resolves difficult frequency conflicts, and achieves these results in a fair and balanced way.

Second, the 28 GHz band plan which the Commission has now adopted, together with the 31 GHz proposal, reflects a spectrum decision that is fair to all of the parties involved. GSO and

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<sup>3/</sup> In the Matter of Rulemaking to Amend Parts 1, 2, 21 and 25 of the Commission's Rules to Redesignate the 27.5-29.5 GHz Frequency Band, to Reallocate the 29.5-30.0 GHz Frequency Band, to Establish Rules and Policies for Local Multipoint Distribution Service and for Fixed Satellite Services and Suite 12 Group Petition for Pioneer's Preference, 11 FCC Rcd 53 (1995) ("Third NPRM").

NGSO FSS systems can be implemented with 28 GHz spectrum designated for their use. MSS systems can proceed to finalize their networks now that feeder link spectrum has been designated for those systems. And LMDS gains a full 1 GHz of spectrum at 28 GHz, plus an additional 300 MHz of spectrum at 31 GHz, which is more than sufficient to implement innovative, interactive LMDS services. The Commission achieved this favorable outcome by designating discrete band segments for services not currently capable of sharing spectrum. At the same time, the new framework provides flexibility for system implementation, inter-system sharing where feasible, and future system growth.

Third, and perhaps most important, the Commission's 28 GHz band plan, together with the proposal to designate 31 GHz spectrum for LMDS, will hasten the availability of innovative communications services for the public. Lockheed Martin's Astrolink<sup>TM/SM</sup> system and other planned satellite networks will provide a wealth of high-speed, broadband interactive services on demand within U.S. borders and around the globe. LMDS providers are expected to offer facilities-based competition to traditional cable and telephone carriers, thereby affording greater consumer choice for a wide range of two-way interactive communications services. These new satellite and terrestrial networks will offer businesses and consumers an exciting variety of new communications tools, a competitive marketplace, and consumer choice.

Finally, LMDS systems can be accommodated at 31 GHz with relative ease. As the Commission observed in the Fourth NPRM, the existing use of the 31 GHz band is relatively light and is concentrated in only a few areas of the country. Thus, the steps that may need to be taken vis-a-vis existing users in the band are entirely manageable. The Commission should therefore be able to reach a 31 GHz decision relatively quickly.

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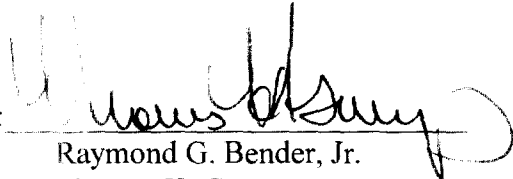
For all of the foregoing reasons, a designation of 31 GHz spectrum for LMDS would serve the public interest. Lockheed Martin therefore supports the Commission's proposal and urges a swift resolution of issues addressed in the Fourth NPRM.

Respectfully submitted,

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August 12, 1996

## CERTIFICATE OF SERVICE

I, Cynthia S. Shaw, a secretary at the law firm of Dow, Lohnes & Albertson, do hereby certify that a copy of the foregoing "Comments of Lockheed Martin Corporation" was sent via hand delivery, this 12th day of August, 1996, to the following:

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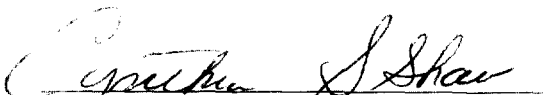
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